
EE / CprE / SE 492 - Bi-weekly Report 4

2/24/18 - 3/09/18

SDMay18-41

Free Market P2P Energy Trading and Analytics

Client: Sodima Solutions

Adviser: Goce Trajcevski

Team Members/Role:

Arun Sondhi: Embedded Engineer/Hardware-Software Interface Lead

Alec Dorenkamp: Software Engineer (back end)

Noah eigenfeld: Software Engineer (front end)

Brendon Geils: Software Engineer/Technical Lead

Jack Myers: Hardware Engineer/Project Manager

Joe Staudacher: Hardware/Power Engineer

Weekly Summary

[A couple sentences describing the progress made during the last two weeks]

Accomplishments in past two weeks:

Arun:

- Worked on React Native app
 - Login Page
 - Settings Page

Alec:

- Completed API authentication
- Finalized DB schema
- Created and refined an inventory of project security concerns
- Fully designed DB aggregation logic

Noah:

- Finished account creation with Okta and MongoDB

- Worked on account configuration
 - Added smart meter locations to accounts
- Worked with hardware and software members to put together high- and low-level design diagrams

Brendon:

- Worked on data aggregation and marketplace
- Finished UI for marketplace

Jack:

- Collected PCB and parts order from ETG
- Cross checked that we have all necessary parts to start assembling boards
- Began looking into datasheet for I2C display for Raspberry Pi
- Met with Brendon to get up to speed on existing smart meter code and what modifications need to be made to interact with board and display
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Joe:

- Worked on revising the pcb design for the second round of fabrication

Pending Issues

- Halfway through implementing the DB aggregation
- Implementing Okta Login via the React Native app

Individual Contributions

Team Member	Contribution Summary	Bi-Weekly Hours	Total Hours (Semester)
Arun Sondhi	Implemented a Login screen and Setting screen for the React Native app	20	58
Alec Dorenkamp	Completed API authentication, finalized DB schema, created and refined an inventory of project security concerns, and fully designed DB aggregation logic	25	63
Noah Eigenfeld	Finished account creation with Okta and MongoDB, worked on account configuration, worked with hardware and software members to put together high- and low-level design diagrams	20	60

Brendon Geils	Worked on data aggregation and marketplace and finished UI for marketplace	25	90
Jack Myers	Collected PCB and parts order from ETG, cross checked that we have all necessary parts to start assembling boards and began looking into datasheet for I2C display for Raspberry Pi	12	79
Joe Staudacher	Worked on revising the pcb design for the second round of fabrication	15	65

Plan for coming weeks

Hardware team:

- Solder and test PCBs
- Develop a "hello world" program for the Raspberry PI display
- Complete second revision of pcbs

Software Team:

- Implement Okta authentication and graph for the React Native app
- Complete download feature and implementing DB aggregation
- Finish account config and begin consumer-facing graphs
- Develop trading edge cases solution

Arun:

- Complete Okta authentication and implement graphs for the React Native app

Alec:

- Finish download feature and implementing DB aggregation

Noah:

- Finish account config by completing location adding and device registration
- Getting started on consumer-facing graphs

Brendon:

- Develop solution for trading edge cases

Jack:

- Solder and test PCBs, during testing make sure that any issues we have are with the design and not flaws in assembling
- Program display and get basic "hello world" functionality up and running
- Figure out what we want to display on the screen and start writing code for it

Joe:

- Complete revision of the new pcb designs